

1. (Thrice amended) In a switched telecommunications network having end office switching systems controlled by a common channel signaling system connected to the end office switching systems and to paired signal transfer points, the method comprising:

monitoring the signaling between the end office switching systems and the signal transfer points and selecting the signaling relating to multiple switched calls and creating a plurality of flat files;

collating the flat files by transaction;

processing the collated flat files to create relational files relating to multiple switched calls for multiple called numbers;

performing an on line analysis program to obtain a multidimensional database from the multiple switched calls to multiple called numbers of said relational files, said on line analysis program supporting interactive analysis for one or more users; and

generating an on line network traffic load report from the multidimensional database based at least in part on said interactive analysis.

2. (Twice amended) A method according to claim 1 wherein said multiple switched calls comprise completed dialed telecommunication sessions between a calling terminal and a called terminal.

3. (Twice amended) A method according to claim 2 wherein said multiple switched calls also comprise incompleting dialed attempts to establish telecommunication sessions between a calling terminal and a called terminal.

7. (Twice amended) A method according to claim 2 wherein said multiple switched calls comprise completed dialed telecommunication sessions between a calling terminal and a called terminal, and including the steps of providing a report of calls dialed to a designated terminal in a designated time period and data regarding the lengths thereof.

8. (Twice amended) A method according to claim 7 wherein said multiple switched calls also comprise incompleting attempts to establish dialed telecommunication sessions between a calling terminal and a called terminal, and including the steps of

providing a report of the incompleted calls dialed to said designated terminal in said designated time period.

23. (Thrice amended) In a switched telecommunications network having end office switching systems controlled by an SS7 common channel signaling system using packet switching via A, B, C, and D links connected to paired signal transfer points connected to one another by D links and connected by A links to the end office switching systems, the method comprising:

- monitoring the signaling in said A links and selecting the A link signaling relating to call set up;

- collating said selected signaling by call;

- processing said collated signaling to create relational files relating to multiple switched calls for multiple called numbers;

- performing an on line analysis program to obtain a multidimensional database from the multiple switched calls to multiple called numbers of said relational files, said on line analysis program supporting interactive analysis for one or more users; and

- generating an on line network traffic load report from the multidimensional database that summarizes ongoing call attempts and completions based at least in part on said interactive analysis.

29. (Thrice amended) In a switched telecommunications network having trunked end office and tandem switching systems controlled by an SS7 common channel signaling system using packet switching via A, B, C, and D links connected to paired signal transfer points connected to one another by C links and connected by A links to end office and tandem switching systems, the method comprising:

- monitoring the signaling in said A links and selecting the A link signaling relating to call set up between end office switching systems through a tandem switching system;

- collating said selected signaling by call based at least in part on A link signaling to and from said tandem switching system;

- processing said collated signaling to create relational files relating to multiple calls;

performing an on line analysis program to obtain a multidimensional database from multiple switched calls of said relational files, said on line analysis program supporting interactive analysis for one or more users; and

generating an on line network traffic load report from the multidimensional database based at least in part on said interactive analysis that summarizes successful and unsuccessful attempts to route calls to multiple called numbers through said tandem switching system.

32. (Thrice amended) A switched telecommunications network having a trunked end office and tandem switching systems controlled by an SS7 common channel signaling system using packet switching via A, B, C and D links connected to paired signal transfer points connected to one another by C links and connected by A links to the end office and tandem switching systems, comprising:

monitors interfacing to the signaling in said A links and selecting the A link signaling relating to call set up between end office switching systems through a tandem switching system;

processing means collating said selected signaling by call based at least in part on A link signaling to and from said tandem switching system;

processing means processing said collated signaling to create relational files relating to multiple switched calls to multiple called numbers;

on line analytical processing means providing a multidimensional database and supporting interactive analysis for one or more users, wherein said relational files are processed to consolidate and summarize successful and unsuccessful attempts to route calls to multiple called numbers through said tandem switching system and provide traffic load reports thereof.

38. (Once amended) In a switched telecommunications network having end office switching systems controlled by a common channel signaling system connected to the end office switching systems and to paired signal transfer points, and including automatic message accounting equipment recording call details of a connection transaction, the method comprising:

monitoring the common channel signaling between the end office switching systems and the signal transfer points and selecting the signaling relating to multiple switched calls;
collating the selected common channel signaling by a call of the multiple switched calls;
collating automatic message accounting equipment output recording call detail; and
processing the collated common channel signaling and automatic message accounting output to provide a multidimensional database to consolidate and summarize ongoing multiple switched calls and provide reports thereof.

43. (Thrice amended) A switched telecommunications network having trunked end office and tandem switching systems controlled by an SS7 common channel signaling system using packet switching via A, B, C, and D links connected to paired signal transfer points connected to one another by C links and connected by A links to the end office and tandem switching systems, said network including:

monitors interfacing to the signaling in said A links and selecting the A link signaling relating to call set up between end office switching systems;

processing means collating said selected signaling by call based at least in part on A link signaling to and from said end office switching systems;

processing means processing said collated signaling to create relational files relating to multiple switched calls to multiple called numbers;

automatic message accounting equipment recording call details of call set up and tear down;

on line analytical processing means supporting interactive analysis for one or more users and providing a multidimensional database, including information relating to said call set up and tear down obtained from said relational files; and

a program for processing said multidimensional database to consolidate and summarize successful and unsuccessful attempts to route calls to multiple called numbers through said tandem switching system and to provide traffic load reports thereof based at least in part on said interactive analysis.